

CULTURAL RESOURCES SURVEY AND TEST EXCAVATIONS FOR THE EMERY ROAD REALIGNMENT

Lead Agency:

**County of San Diego
Department of Public Works
Contact: Ms. Lorrie Bradley
9150 Chesapeake Drive, Suite 200
San Diego, CA 92123
(858) 874-4055**

Preparer:

**Carmen Zepeda-Herman, M.A.
RECON
1927 Fifth Avenue
San Diego, CA 92101
(619) 308-9333
RECON Number 4935A**

A handwritten signature in cursive script, reading "Carmen Zepeda-Herman", written in black ink.

Signature

February 16, 2009

NATIONAL ARCHAEOLOGICAL DATA BASE INFORMATION

Authors: Ms. Carmen Zepeda-Herman, M.A.

Consulting Firm: RECON Environmental, Inc.
1927 Fifth Avenue, Suite 200
San Diego, CA 92101-2358

Report Date: February 16, 2009

Report Title: Cultural Resources Survey and Test Excavations for the
Emery Road Realignment, San Diego County, California

Submitted to: County of San Diego; Contact: Ms. Lorrie Bradley

Prepared for: County of San Diego
Department of Public Works
5469 Kearny Villa Road, Suite 305
San Diego, CA 92123

Project Number: RECON Number 4935A

USGS Quadrangle Map: 7.5 Minute, Potrero 1960 (photo revised 1982)

Keywords: CA-SDI-19,241, bedrock milling, lithic and ceramic
scatters, ground stone artifacts, Late Prehistoric Period

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LIST OF ACRONYMS

| | |
|--------|--------------------------------------|
| AMSL | Above mean sea level |
| APE | Area of Potential Effect |
| CE | Common era |
| CEQA | California Environmental Quality Act |
| CFR | Code of Federal Regulations |
| cm | Centimeters |
| County | County of San Diego |
| DPR | Department of Parks and Recreation |
| GPS | Global Positioning Station |
| mm | Millimeter |
| RPO | Resource Protection Ordinance. |
| SDAC | San Diego Archaeological Center |
| STP | Shovel test pit |

MANAGEMENT SUMMARY

This report details the background, methods, and results of the cultural resource survey and test excavations for the Emery Road Realignment Project. The County of San Diego (County) proposes to straighten and widen a hazardous curve on Emery Road by cutting a new alignment through the small, rocky ridge that the current road circumvents. The Area of Potential Effect (APE) includes a work area of approximately 1,100 feet (0.2 mile) in length needed for the realignment. The survey and test excavation program was undertaken in accordance with requirements of the County to avoid significant impacts to cultural resources under the California Environmental Quality Act (CEQA).

RECON conducted the survey on November 7 and December 22, 2008 and documented the fact that site CA-SDI-19,241 is within the project APE. Site CA-SDI-19,241 consists of 13 bedrock milling features, lithic and ceramic scatters, and ground stone artifacts.

Disturbance to the site included an east–west power line access road and two turnaround areas next to the access road.

RECON, accompanied by a Native American monitor, completed the test excavation and surface collection of the site on December 22, 2008 and January 7, 2009. A total of 172 pieces of debitage, five ground stone tools, five ceramic sherds, and ten flaked lithic tools was recovered. The majority were recovered during the surface collection. Only eleven pieces of debitage and one flaked lithic tool were recovered from the shovel test pits (STPs). Three out of the seven STPs contained cultural materials.

CA-SDI-19,241 is recommended a significant historical resource under CEQA Criterion 4. The proposed project would cause a substantial adverse change in the significance of site CA-SDI-19,241. A data recovery and construction monitoring are recommended for the road realignment.

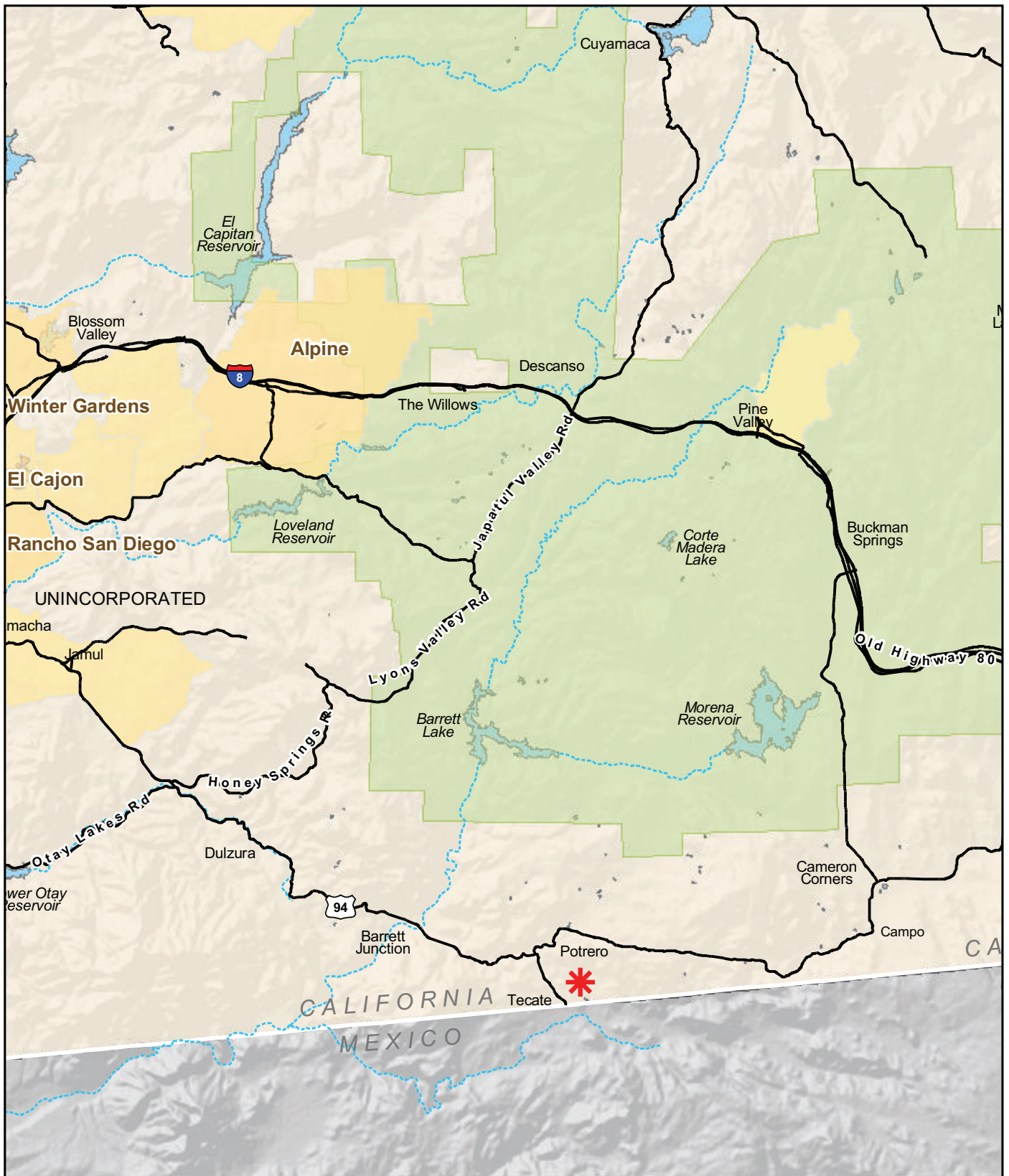
1.0 INTRODUCTION

1.1 Project Description

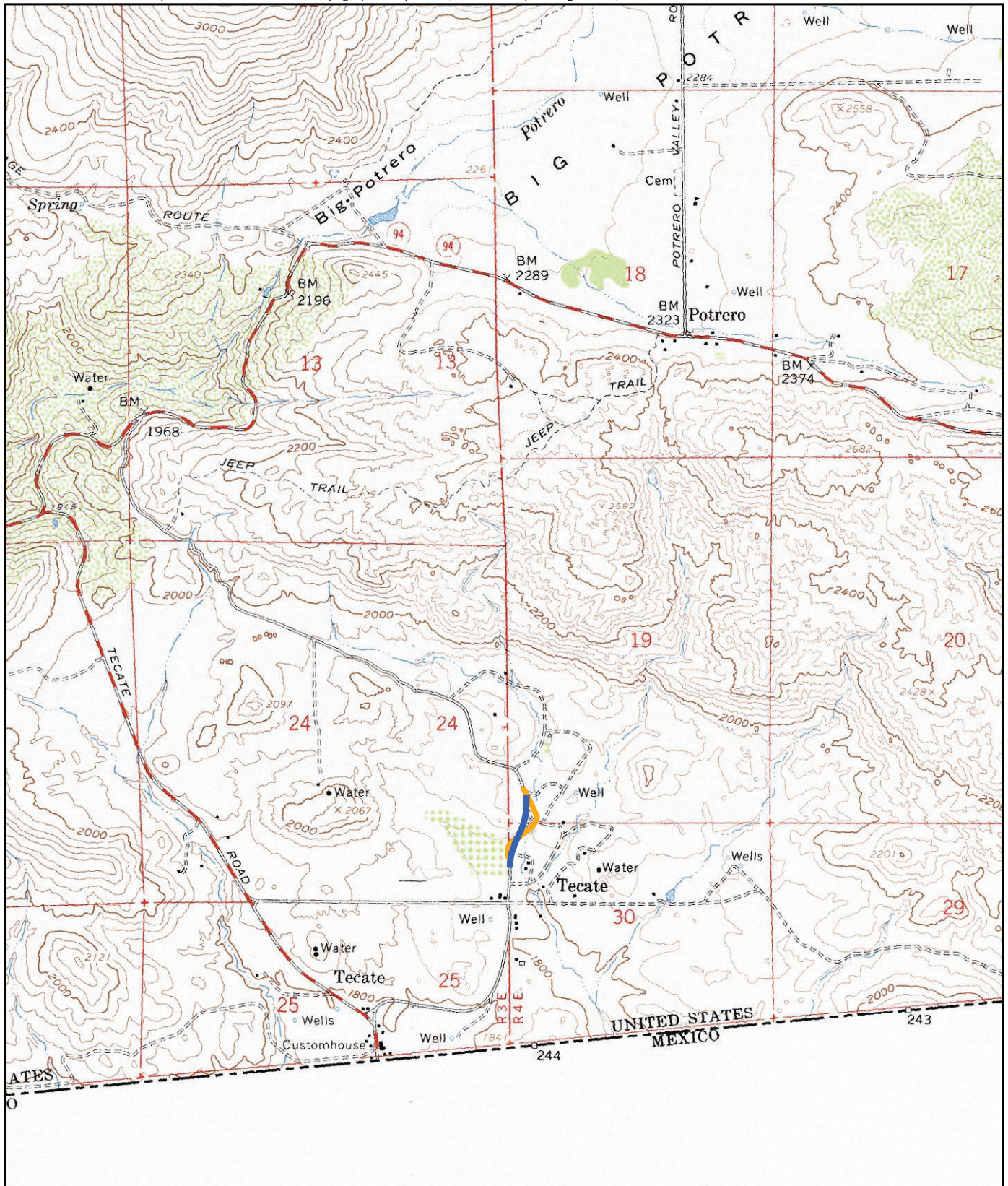
The San Diego County (County) Department of Public Works is proposing to realign Emery Road in eastern San Diego County. The County has identified a hazardous curve on Emery Road in the unincorporated area of eastern San Diego County, approximately 1.5 miles south–southwest of the town of Potrero and approximately 0.75 mile northeast of the Mexican border crossing at Tecate (Figures 1 and 2). The combination of the narrow road bed, blind curve, and frequent cross-border commercial truck traffic has resulted in hazardous road conditions. The County proposes to straighten and widen the road in this section by cutting a new alignment through the small, rocky ridge that the current road circumvents (Figure 3).

The realignment of Emery Road is proposed to occur along 0.14 mile of the roadway northward from a point approximately 0.1 mile north of Humphries Road (see Figure 2). From this southern point, which occurs on a north–south section of the road, the new alignment is proposed to depart from its present course around the eastern foot of the low, northwest–southeast tending ridge and along the western edge of the unnamed creek immediately to the east to cut more directly north–northeast through the toe of the ridge (see Figure 3). This will result in the elimination of a southern, gradual curve as well as the hazardous curve.

This road cut will be made through the ridge on both sides of the road, resulting in the formation of a trench approximately 230 feet long, up to 100 feet wide, and up to 15 feet



 Project Location



- Project Location
- Alternate Route

FIGURE 2

Project Location on USGS Map



FIGURE 3

deep. The widest, deepest portion of the road cut will correspond with the highest point on the ridge (see Figure 3).

Fill slopes up to ten feet in width will be constructed over short sections below the road grade immediately north and south of the road cut. Portions of the fill will extend into the edges of the shallow drainage west of the road and north of the ridge and into the creek immediately to the east.

This realignment project also proposes to widen the road bed by approximately 50 percent, to a width of 40 feet. The limits of work for road conditioning extend about 300 feet north and 100 feet south of the realigned section within the existing road bed, creating a work area approximately 1,100 feet (0.2 mile) long. This work area is the Area of Potential Effect (APE).

The survey area included a 100-foot buffer west of the centerline of the northern and southern sections of the realignment, a 150-foot buffer west of the centerline of the middle section of the realignment, and a 150-foot buffer east of the centerline of the alternate realignment route (Figure 4). The archaeological investigation described in this report was implemented to support the County's responsibilities under the California Environmental Quality Act (CEQA) to incur no significant impacts to cultural resources in the implementation of the proposed project.

1.2 Existing Conditions

1.2.1 Environmental Setting

Natural Setting

The proposed project is located north of Humphries Road, and south of Highway 94. The Mexican Border crossing at Tecate is approximately 1 mile southeast. The topography is consists of a wide valley with low hills. It ranges from 1,820 feet above mean sea level (AMSL) to 1,880 feet AMSL. An unnamed drainage runs east of the current road alignment. The area west of Emery Road was burned during the 2007 Harris Fire.

There are three soil types recorded in the area, including Cieneba, Las Posas, and Wyman series. The Cieneba series consists of rocky coarse sandy loam, with 9- to 30-percent slopes (CmE2). It is rolling to hilly, has rock outcrops, and is only 5 to 15 inches deep over hard granodiorite. The Las Posas series consists of fine sandy loam with 9- to 15-percent slopes (LpD2). It is not stony and is 26 to 40 inches deep over hard rock. The Wyman series consists of loam with 9- to 15-percent slopes (WmC). The A horizon of this series is 9 to 19 inches thick (U.S. Department of Agriculture 1973).



- Project Area
- Cultural Resource Survey Area
- Alternate Route

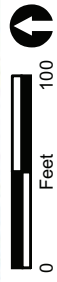


FIGURE 4

Survey Area on Aerial Photograph

Eight vegetation communities are present within the proposed project area: coastal sage-chaparral scrub, disturbed Diegan coastal sage scrub, open coast Live Oak woodland, riparian forest, eucalyptus woodland, non-native vegetation, ruderal grasses, and old olive orchard (Lovio 2009).

The coastal sage-chaparral scrub is dominated by chamise (*Adenostoma fasciculatum*), scrub-oak (*Quercus berberidifolia*), spiny redberry (*Rhamnus crocea*), and yucca (*Yucca schidigera*) on the east-facing slope north of the ridge, and by spiny redberry and bush penstemon (*Keckiella antirrhinoides*) with chaparral whitethorn (*Ceanothus leucodermis*) on the rocky ridge.

The disturbed Diegan coastal sage scrub occurs near the unnamed drainage east of Emery Road. It is dominated by California sagebrush (*Artemisia californica*) and flat-topped buckwheat (*Eriogonum fasciculatum*), with scrub-oak. The open coast Live Oaks occur around the ridge top west of the road.

Riparian vegetation consists of a mixture of disturbed scrub dominated by mule fat (*Baccharis salicifolia*), non-native salt cedar (*Tamarix* sp.), and open riparian forest with cottonwood (*Populus fremontii*), willow (*Salix* spp.), and coast live oak. The understory is primarily non-native grasses and continuous with a matrix of ruderal vegetation.

The vegetation south of the ridge and west of the road consists of ruderal grasses, an abandoned olive orchard, and eucalyptus trees (*Eucalyptus* spp.). This area was probably used for agriculture in the past (Lovio 2009).

Cultural Setting

The prehistoric cultural sequence in San Diego County is generally conceived as comprising three basic periods: the Paleoindian, dated between about 11,500 and 8,500 years ago and manifested by the artifacts of the San Dieguito Complex; the Archaic, lasting from about 8,500 to 1,500 years ago and manifested by the cobble and core technology of the La Jolla Complex; and the Late Prehistoric, lasting from about 1,500 years ago to historic contact (i.e., common era [CE] 500 to 1769) and represented by the Cuyamaca Complex. This latest complex is marked by the appearance of ceramics, small arrow points, and cremation burial practices.

Paleoindian Period

The Paleoindian Period in San Diego County is most closely associated with the San Dieguito Complex, as identified by Rogers (1938, 1939, 1945). The San Dieguito assemblage consists of well-made scraper planes, choppers, scraping tools, crescentics, elongated bifacial knives, and leaf-shaped points. The San Dieguito Complex is thought to represent an early emphasis on hunting (Warren et al. 1993:III-33).

Archaic Period

The Archaic Period in coastal San Diego County is represented by the La Jolla Complex, a local manifestation of the widespread Millingstone Horizon. This period brings an apparent shift toward a collecting economy and an emphasis on seed resources, small game, and shellfish. The local cultural manifestations of the Archaic Period are called the La Jollan Complex along the coast and the Pauma Complex inland. Pauma Complex sites lack the shell that dominates many La Jollan sites. Along with an economic focus on gathering plant resources, the settlement system appears to have been more sedentary. La Jollan and Pauma assemblages are dominated by rough, cobble-based choppers and scrapers, and slab and basin metates. Elko series projectile points appeared late in the period. Large deposits of marine shell at coastal sites argue for the importance of shellfish gathering to the coastal Archaic economy (True 1980).

Late Prehistoric Period

Near the coast and in the Peninsular Mountains beginning approximately 1,500 years ago, patterns began to emerge which suggest the ethnohistoric Kumeyaay. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversify and intensify during this period, with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive but effective technological innovations. The late prehistoric archaeology of the San Diego coast and foothills is characterized by the Cuyamaca Complex. It is primarily known from the work of D.L. True (1970) at Cuyamaca Rancho State Park. The Cuyamaca Complex is characterized by the presence of steatite arrowshaft straighteners, steatite pendants, steatite comales (heating stones), Tizon Brownware pottery, ceramic figurines reminiscent of Hohokam styles, ceramic "Yuman bow pipes," ceramic rattles, miniature pottery, various cobble-based tools (e.g., scrapers, choppers, hammerstones), bone awls, manos and metates, mortars and pestles, and Desert Side-Notched and Cottonwood Series projectile points.

Ethnohistory

The Kumeyaay (also known as Kamia, Ipai, Tipai, and Diegueño) occupied the southern two-thirds of San Diego County. The Kumeyaay lived in semi-sedentary, politically autonomous villages or rancherias. A settlement system typically consisted of two or more seasonal villages with temporary camps radiating away from these central places (Cline 1984). Their economic system consisted of hunting and gathering, with a focus on small game, acorns, grass seeds, and other plant resources. The most basic social and economic unit was the patrilocal extended family. A wide range of tools was made of locally available and imported materials. Numerous other flaked-stone tools were made, including scrapers, choppers, flake-based cutting tools, and biface knives. Preferred stone types were locally available metavolcanics, cherts, and quartz. Obsidian was imported from the deserts to the north and east. Ground stone objects include manos

and metates, and mortars and pestles typically made of locally available fine-grained granite. Both portable and bedrock types are known. The Kumeyaay made fine baskets. These employed either coiled or twined construction. The Kumeyaay also made pottery, using the paddle-and-anvil technique. Most were a plain brown utility ware called Tizon Brownware, but some were decorated (May 1978; Meighan 1954; Spier 1923).

Historic Period

San Diego was first settled by Spanish colonists in A.D. 1769, when the Mission San Diego de Alcalá and Presidio de San Diego were founded. The Spanish period (1769–1820) economy was based on cattle grazing. Missions were major population centers, and mission cattle roamed freely over open range, tended by Indian vaqueros. European contact substantially and pervasively stressed the social, political, and economic fabric of aboriginal culture (Shipek 1986, 1991). Disease, starvation, and a general institutional collapse caused emigration, birth rate declines, and high adult and infant mortality levels for the aboriginal groups in San Diego County (Shipek 1991).

The citizens of Mexico successfully revolted against the Spanish in 1821. The Mexican government secularized the missions in 1833. The U.S took over the northern half of Mexico as a result of the Mexican–American War in 1848 and California became a state in 1850. American settlement in southern California was slow during the Gold Rush, when northern California experienced a dramatic population explosion (Rolle 1998). By the late 1800s, the County witnessed the beginnings of a recognizable downtown San Diego area and the gradual development of a number of outlying communities, many of which were established around previously defined ranchos and land grants. These communities composed of an aggregate of people who lived on scattered farmsteads tied together through a common school district, church, post office, and country store (Hector and Van Wormer 1986, Pourade 1963).

The community of Tecate began in the early 1800s, when farmers began working in the valley. In 1831 Juan Bandini received a land grant of 4,500 hectares from the Mexican government and laid out the town (Baja Quest 2009). In 1912, the first Tecate post office was built and then burnt in 1914 by bandits. Tecate became a port of entry in 1921. A new port of entry was constructed in 1934, and the original port was abandoned (Tordoff et al. 2003). In 1943 the Tecate Brewery was founded on the Mexican side (Baja Quest 2009).

1.2.2 Previously Recorded Sites Adjacent to the Project Area

Record searches with a one mile-radius buffer were conducted at the California Historical Resources Information System, South Coastal Information Center (SCIC) and the San Diego Museum of Man (Confidential Appendix A). There have been numerous

cultural resource investigations within a one-mile radius of the project. None of these have included the project area.

SCIC identified five historic and ten prehistoric sites within the mile radius. The Museum of Man identified eight of the prehistoric sites listed by SCIC and four of the historic sites listed by SCIC. Table 1 lists the sites within a one-mile radius. The historic sites include one occupied structure, the original international border crossing at Tecate, the existing border crossing, a wood structure, and a well shaft. The historic database contained one address, the U.S. Custom House. The prehistoric sites include six lithic scatters, two temporary camps, one ceramic scatter, and one bedrock-milling site. Only one site, CA-SDI-12217H, is within one quarter mile of the project area.

TABLE 1
RESOURCES PREVIOUSLY RECORDED WITHIN ONE MILE OF THE PROJECT

| Trinomial | Museum of Man | Site Type | Dimensions | Report Reference |
|-------------|---------------|------------------------------|----------------------------|------------------------|
| SDI-6985 | W-3835 A | Ceramic Scatter | 5 x 5 m ² | Dominici 1978 |
| SDI-6986 | W-3836 | Temporary camp | 120 x 150 m ² | Dominici 1984 |
| SDI-6988H | W-3837 | Well shaft | 1.5 x 1.5 m ² | Burkenroad 1978 |
| SDI-7049 | W-2237 | Temporary camp | 470 x 100 m ² | Eidsness 1979 |
| SDI-9171 | | Lithic scatter | 30 x 30 m ² | Beck 1981 |
| SDI-9835 | W-3835 B | Bedrock milling | 1 x 2 m ² | Polan 1984 |
| SDI-11,166 | W-4035 | Lithic scatter | 10 x 5 m ² | Wahoff and Shultz 1989 |
| SDI-11,167 | W-4036 | Lithic scatter | 40 x 20 m ² | Ritz et al. 1991a |
| SDI-11,168 | W-4037 | Lithic scatter | 5 x 3 m ² | MacDavis et al. 1989 |
| SDI-11,169 | W-4038 | Lithic scatter | 50 x 10 m ² | Lilburn and Tift 1989 |
| SDI-12,216 | | Lithic scatter | 15 x 15 m ² | Ritz et al. 1991b |
| SDI-12,217H | W-4749 | Wood structure remains | 100 x 30 m ² | Ritz et al. 1991c |
| SDI-12,218H | W-4750 | Structure | 30 x 15 m ² | Ritz et al. 1991d |
| SDI-12,219H | W-4751 | Border Crossing station | 80 x 55 m ² | Ritz et al. 1991e |
| SDI-16,798H | | Tecate Customs House Complex | 415 x 315 ft. ² | Tordoff et al. 2003 |

CA-SDI-12217H was recorded in 1991 as the remains of a wooden structure consisting of purple glass fragments, window sash weights, lumber, and miscellaneous metal pieces. No foundation was located. The area had been previously graded for the construction of the historic structure (Ritz et al. 1991c).

The historic maps were also reviewed as part of the background research. The 1872 San Diego County and the Cuyamaca 1903 (reprinted in 1942) USGS 30-minute quadrangle maps showed Tecate Road aligned differently than its current alignment. The 1944 (reprinted 1948) Potrero USGS 15-minute quadrangle and the 1960

Potrero/Tecate USGS 7.5-minute quadrangle maps showed Tecate Road close to its current alignment and Emery Road in its current alignment.

1.3 Applicable Regulations

Compliance with CEQA requires consideration of impacts to cultural resources as historical resources within the Emery Road Realignment Project, specifically State CEQA Guidelines Section 15064.5(a) and 15064.5(c).

According to CEQA Section 15064.5 (a), a historical resource includes the following:

- 1) A resource listed in, or determined to be eligible for listing on the California Register of Historical Resources,
- 2) A resource included in the local register, and
- 3) A resource which an agency determines to be historically significant.

CEQA Section 15064.5(b) defines substantial adverse change in the significance of an historical resource as the physical demolition, destruction, relocation, or alteration of an historical resource or its immediate surroundings such that the significance is materially impaired.

San Diego County Local Register of Historical Resources includes resources with any of the following criteria:

- 1) Is associated with events that have made a significant contribution to the broad patterns of San Diego County's history and cultural heritage;
- 2) Is associated with the lives of persons important the history of San Diego County or its communities;
- 3) Embodies the distinctive characteristics of a type, period, San Diego County region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- 4) Has yielded, or may be likely to yield, information important in prehistory or history.

2.0 GUIDELINES FOR DETERMINING SIGNIFICANCE

Specific guidance was from Section 4.2, County of San Diego *Guidelines for Determining Significance of Cultural Resources: Archaeological and Historic Resources* (County 2007). Section 4.2 states the following:

- 1) The project causes a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the State CEQA Guidelines. This shall include the destruction, disturbance, or any alteration of characteristics or elements of a resource that cause it to be significant in a manner not consistent with the Secretary of Interior Standards.
- 2) The project causes a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the State CEQA Guidelines. This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory.
- 3) The project disturbs any human remains, including those interred outside of formal cemeteries.
- 4) The project proposes activity or uses damaging to significant cultural resources as defined by the Resource Protection Ordinance and fails to preserve those resources.

3.0 RESEARCH DESIGN

A cultural resources survey and test excavation investigation were conducted in accordance with requirements of the County to identify significant adverse impacts to cultural resources under CEQA. CEQA Section 15064.5 identifies adverse impacts to historical resources. These include destruction or disturbance to an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory.

The surface artifacts at CA-SDI-19,241 suggested a strong potential to address a number of regional research issues including site chronology and function, and settlement patterns. Knowing when CA-SDI-19,241 was occupied will help place it within the regional occupation sequence.

4.0 ANALYSIS OF PROJECT EFFECTS

4.1 Methods

4.1.1 Survey Methods

RECON archaeologist Carmen Zepeda-Herman, accompanied by RECON biologists Mike Nieto and John Lovio, conducted the on-foot survey of the APE on November 7, 2008, using 10-meter transects. The survey area included a 100-foot buffer west of the centerline of the realignment. An additional survey of an alternative route east of the drainage was conducted on December 22, 2008 by RECON archaeologists Carmen Zepeda-Herman, Harry Price, and Tom Sowles accompanied by Native American monitor Steve Leash. The additional survey area included a 150-foot buffer east of the centerline of the alternate realignment route (see Figure 4).

The survey area was inspected for evidence of archaeological materials such as debris, flaked and ground stone tools, ceramics, milling features, and human remains. When archaeological materials were found, the transect intervals were reduced to 3-5 meters. The locations of the features and artifacts were recorded using a sub-meter Global Positioning System (GPS) unit. Bedrock milling features were measured and photographed. Milling forms were completed for each milling feature found. Scaled sketch maps were drawn of the milling features within the APE (Milling Features 8 and 11). California Department of Parks and Recreation (DPR) primary site forms and maps were filed (Confidential Appendix B). The survey area was photographed to document environmental setting, identifying surrounding landmarks and general conditions.

On January 9, 2009, the site was resurveyed in order to complete a surface collection of the artifacts. During this task, the survey extended about 150 feet west of the middle section of the realignment. Prior to collection, each item's location was recorded using a sub-meter GPS unit. Each collected artifact was placed in a plastic bag accompanied by a numbered identification tag.

4.1.2 Excavation Methods

A test excavation program was initiated in order to determine if any significant cultural resources would be affected by proposed road realignment project. The testing program was conducted on December 22, 2008 and January 7, 2009 by RECON archaeologists Harry Price, Tom Sowles, and Carmen Zepeda-Herman and Native American monitors Steve Leash and Gabe Kitchen Jr. The test excavation program consisted of ten rectangular 25-by-50-cm shovel test pits (STPs) (Confidential Appendix C). Three STPs were placed within the APE. One was placed immediately west of it. Three STPs were placed around milling features in the southern part of the site. Three STPs were placed

in the northwestern corner of the site. None were placed in the heaviest concentration of artifacts, because this is the area where the access road has disturbed the site and exposed artifacts.

The locations of the ten STPs were recorded using a sub-meter GPS unit. The purpose of the STPs was to assess site integrity, depth, content, Native American heritage values, and potential project effects.

The STPs were hand-excavated in arbitrary 10-cm contour levels. Materials from the STPs were dry-screened through one-eighth-inch mesh. Recovered items were collected and bagged, labeled with their provenience, and taken to RECON for processing and analysis. Notes and observations of any disturbances, soil type, depth of the archaeological deposit and materials recovered, and the depth of each pit and unit were made. Photographs were taken. A California DPR site update form and map were completed.

4.1.3 Laboratory Methods

Materials collected in the field were brought to RECON for processing and analysis. All items were counted, weighed, and cataloged according to class, type, and material, and the data was entered into a Microsoft Access database. Classes included debitage, flaked lithic artifacts, ground stone artifacts, and ceramics.

Debitage

Debitage consists of flakes and angular waste. That is the stone byproducts of stone tool manufacture and maintenance. The items in this category were sorted by geological parent material and subsequently into groupings of flakes comprising seven types and angular waste comprising two types. The sorting of these items is based on size and on the presence of flake scars and cortex or rind (Table 2).

The flaked lithic debris analysis followed a series of steps that were originally proposed by Jane Rosenthal (Norwood et al. 1981) and geared towards reconstructing the stages of stone tool manufacture. For the current study, the definition of a flake is a stone which has been removed from a larger stone (core) by human activity and that retains evidence of this removal in the form of a striking platform and a bulb of percussion. Angular waste includes items that are probably flake fragments which lack the bulb or the striking platform. In addition, the angular waste group includes broken stone fragments that can be produced during hard hammer percussion where a strike can result in pieces breaking off the parent stone that do not have the attributes of a flake.

TABLE 2
STANDARD FLAKE TYPOLOGY FOR SMALL ASSEMBLAGES

| Bulb | Platform | Relative Length | Cortex | Dorsal Scars | Other | Assumed Process/ Type | Reduction Stage |
|---------|----------|-----------------|---------|--------------|-----------------|------------------------------------|-----------------|
| Present | Present | 2 x width | None | 2+ | Parallel | "Blade" type flake | Tertiary |
| Present | Present | --- | None | --- | Diverging, thin | Biface thinning flake | Tertiary |
| Present | Present | 2+ cm | 80%+ | None | --- | Platform creation, cortex removal | Primary |
| Present | Present | 2+ cm | 30%–80% | 0–1 | --- | Cortex removal | Primary |
| Present | Present | 2+ cm | -30% | 1+ | --- | Core reduction, basic shaping | Secondary |
| Present | Present | -2 cm | 0% | 1+ | --- | Finishing, resharpening | Tertiary |
| Present | Present | -2 cm | Present | 1+ | --- | Trimming | Tertiary |
| Absent | Absent | --- | Present | --- | --- | Shatter during primary reduction | Primary |
| Absent | Absent | --- | Absent | --- | --- | Shatter during secondary reduction | Shatter |

SOURCE: Norwood et al. 1981

Flaked Lithic Artifacts

Formal flaked stone tools were assigned individual catalog numbers. Attributes were recorded for each of the formal tools and for cores. Formal tools and cores are recognized by a combination of distinctive attributes. RECON employs a set of descriptive definitions as the initial means for identifying artifact types. The source of these definitions comes from Kaldenberg's work at Rancho Park North (1976). Attributes include identifying the parent material, dimensions, weight, whether the tool is complete or broken, the production base, the presence of cortex, the angle of the working edge, and a series of attributes regarding use, damage, and modification. Specimens were checked for use wear using a 10x magnifying glass.

Ground Stone Artifacts

As with flaked lithic debris, ground stone items were separated into categories based on "type" and parent material. The types of ground stone that are defined in this system include manos, metates, basins, pestles, and bowls. Material type, attributes, and condition define these items.

Ceramics

All recovered ceramic artifacts were examined individually under 10x magnifying hand lens to determine temper type, sherd type (e.g., body or rim), the presence of a surface finish, paste, condition (e.g., shaped after breakage or burned), and maximum thickness.

Tizon Brown Ware

Tizon Brown Ware was defined by Hargrave in 1938 and refined by Dobyns and Euler in 1958. Its core area was originally in northwestern Arizona, but it was later extended to include southern California and northern Baja California. In her review of Tizon Brown Ware, Griset suggests that it appears in the southern California archaeological record prior to C.E. 800, but does not become common until about C.E. 1400 (Griset 1996). This suggests that it is a Patayan II (C.E. 1000–1500) and III (C.E. 1500 to present) ware. Rogers (n.d.) and May (1978) proposed numerous types within Tizon Brown Ware, but these types lacked utility, and virtually no archaeologists use them today.

4.1.4 Curation

The professional standard of care for archaeological resources requires curation of important artifacts and ecofacts. The primary reason that prehistoric archaeological sites are important is the information they can provide to answer questions about the people who created them. This information is provided by the provenience of the materials at the site and the materials themselves. Curation of the artifact collection contributes to the mitigation of impacts to significant historical resources by making collections available for future study. Without artifact curation, the data recovered from a significant site ceases to have the potential to yield information to the prehistory of the local area, California, or the nation. Thus, curation of the artifacts and their associated documents appropriately mitigates negative impacts to archaeological sites.

The need to curate recovered materials is reflected in standards set by government and professional organizations. According to the Secretary of the Interior Standards, collections must be accessible by agencies, the professional community, and the general public. Curation arrangements sufficient to preserve artifacts and records generated by the investigation must be provided to assure the availability of these materials for future use in research, interpretation, preservation, and resource management activities. Archeological artifacts and records are part of the documentary record of an archeological site.

The Advisory Council on Historic Preservation states that a “responsible archaeological data recovery plan” incorporates appropriate arrangements for curation of archaeological materials and records (Advisory Council on Historic Preservation 2009).

The Register of Professional Archaeologists (2008) standards of research performance state that artifact collections “must be deposited at an institution with permanent curatorial facilities, unless otherwise required by law”.

The California State Historical Resources Commission established guidelines for curation in the Public Resources Code, Section 5020.5(b). The guidelines pertain to collections that are excavated or removed from prehistoric or archaeological sites on non-federal public and private land in the State of California in connection with a local government agency permit or application for approval and CEQA guidelines. Data generated during the study, excavation, and creation of the collection are considered part of the collection. Archaeological collections and their associated records must be housed at qualified repositories that have the capability to ensure adequate permanent storage, security, and ready access for qualified users (State of California 1993). Collections may include but are not limited to:

- Intact or fragmentary artifacts of human manufacture (such as tools, weapons, pottery, basketry and textiles);
- By-products, waste products, or debris resulting from the manufacture or use of cultural or natural materials (such as slags, dumps, debitage, and cores); and
- Organic material (such as plant and animal remains).

The materials, supporting documents, and report compiled during the test program at the Emery Road Realignment Project will be curated at the San Diego Archaeological Center (SDAC). Cataloguing of the artifacts conformed to the requirements of the SDAC to facilitate curation of the collection upon project completion. The SDAC provides permanent curatorial stewardship for archaeological collections and meets the federal standard (36 CFR 79) for curation facilities.

4.1.5 Native American Participation

Native American participation was required per the County’s *Report Format and Content Requirements* (2007) during the testing excavation phase of the project. A Native American observer was present during the test excavations and the alternate realignment route survey. Steve Leash and Gabe Kitchen Jr. participated as Native Americans on behalf of the Kumeyaay Tribe.

4.2 Results

4.2.1 Survey

One prehistoric site, CA-SDI-19,241, was identified within the project area. The site measured 85 x 67 m. Disturbances to the site included a dirt power line access road that runs in an east–west direction through the site and two vehicle turnaround spots. The site consisted of 13 bedrock milling features, lithic and ceramic scatters, and four ground stone artifacts (Confidential Appendix C). There were 16 milling slicks and possibly another feature located under thick brush. Seven of the features were located among low-profile boulders south of the east–west access road that divides the site. One was located southeast of the low-profile boulders; two were located upslope from the low-profile boulders, and the final three features were located among another set of boulders north of the east–west access road.

- Feature 1 was a low-profile outcrop that measured 2.0 by 1.0 by 0.3 m. It contained two slicks. Element A was a slick measuring 29 by 15 cm. Element B was a slick measuring 31 by 46 cm.
- Feature 2 was a low-profile outcrop that measured 3.5 by 1.5 m and was at ground level. It contained two slicks. Element A was a slick measuring 75 by 46 cm. Element B was a slick measuring 32 by 19 cm.
- Feature 3 was a low-profile outcrop that measured 4.0 by 1.5 by 0.2 m. It contained two slicks. Element A was a slick measuring 43 by 21 cm. Element B was 30 by 20 cm.
- Feature 4 was a low-profile outcrop that measured 1.0 by 0.5 by 0.2 m. It contained one slick measuring 75 by 42 cm.
- Feature 5 was a low-profile outcrop that measured 0.8 by 0.8 by 0.3 m. It contained one slick measuring 66 by 26 cm.
- Feature 6 was a low-profile outcrop that measured 1.0 by 1.0 by 0.1 m. It contained one slick measuring 32 by 23 cm.
- Feature 7 was a medium-profile outcrop that measured 2.0 by 2.0 by 0.7 m. It contained one slick measuring 59 by 40 cm.
- Feature 8 was a medium-profile outcrop that measured 38 by 20 by 0.6 m. It contained one slick measuring 38 by 20 cm.
- Feature 9 was a low-profile outcrop that measured 1.4 by 1.0 by 0.3 m. It contained one slick measuring 44 by 18 cm.

- Feature 10 was a medium-profile outcrop that measured 1.9 by 1.2 by 0.7 m. It contained one slick measuring 12 by 10 cm.
- Feature 11 was a high-profile outcrop that measured 2.4 by 1.6 by 1.2 m. It contained one slick measuring 13 by 14 cm.
- Feature 12 was a high-profile outcrop that measured 2.4 by 1.8 by 1.4 m. It contained one slick measuring 47 by 26 cm.
- Feature 13 was a low-profile outcrop that measured 4.0 by 3.0 m. The height measurement was inadvertently not taken. Feature 13 contained one slick measuring 34 by 22 cm.

During the initial survey, the identified artifacts consisted of one broken mano fragment, three quartz flakes, 19 metavolcanic flakes, and 25 green felsite flakes. They were scattered between the northern and southern set of boulders, with majority concentrated around the northern set. The survey for the surface collection resulted in more than tripling the number of artifacts. The surface collection survey was conducted after heavy rains, which likely exposed more artifacts. The total collected included two broken mano fragments, two broken metate fragments, five ceramic sherds, nine flaked lithic artifacts, and 161 pieces of debitage.

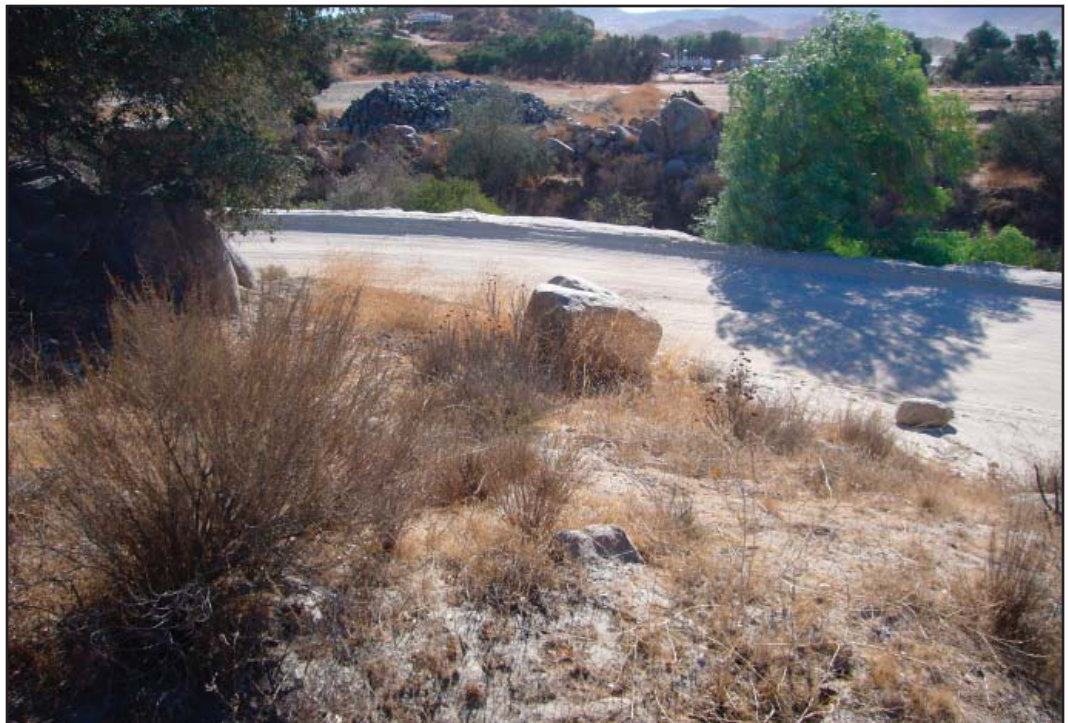
Ground visibility in the majority of the remainder of the survey area was good to excellent due to the wild fires of October 2007. Disturbances included a large area at the southeast end of the survey area that had been graded and had gravel laid down for a parking lot (Photograph 1). There was modern trash scattered on both sides of the road, with a higher concentration on the northwestern extent of the proposed alignment. On the east side of Emery Road, a smaller area had been graded, native boulders had been moved, and gravel pile stockpiled (Photograph 2). In addition, there is the power line access road west of Emery Road that runs in an east–west direction (Photograph 3). It appeared that the area north and south of this road had been used as turnaround area for construction equipment in the past.

4.2.2 Excavation

Table 3 provides the summary of the materials recovered during the test excavation and surface collection (for a complete artifact catalog, see Appendix A). A total of 172 pieces of debitage, five ground stone tools, five ceramic sherds, and ten flaked lithic tools were recovered. The majority was recovered during the surface collection. Only eleven pieces of debitage and one flaked lithic tool were recovered from the STPs. Three out of the seven STPs contained cultural materials. One of these STPs was within the APE, another was immediately adjacent to the APE, and the third one was approximately 9 m west of the western edge of the APE.



PHOTOGRAPH 1
Emery Road with Gravel Parking Lot in the Background,
Looking Southeast



PHOTOGRAPH 2
Emery Road with Stockpile of Boulders with Graded Pad behind,
Looking East



PHOTOGRAPH 3
Utility Access Road Running Through Site CA-SDI-19,241,
Looking Southeast

TABLE 3
SUMMARY OF ARTIFACTS

| Task | Data | Ceramic | % | Debitage | % | FLA | % | Groundstone | % | Grand Total | % |
|--------------------|------------------|---------|------|----------|-------|-------|------|-------------|-------|-------------|--------|
| STPs 25cm x 50cm | Count | 0 | | 11 | 5.76 | 1 | 0.52 | 0 | - | 12 | 6.28 |
| | Weight (g) | 0 | | 18.6 | 0.61 | 39.4 | 1.29 | 0 | - | 58 | 1.90 |
| Surface collection | Count | 5 | 2.62 | 161 | 84.29 | 9 | 4.71 | 4 | 2.09 | 179 | 93.72 |
| | Weight (g) | 113 | 3.70 | 788.4 | 25.80 | 173.8 | 5.69 | 1923 | 62.92 | 2998.2 | 98.10 |
| | Total Count | 5 | 2.62 | 172 | 90.05 | 10 | 5.24 | 4 | 2.09 | 191 | 100.00 |
| | Total Weight (g) | 113 | 3.70 | 807 | 26.41 | 213.2 | 6.98 | 1923 | 62.92 | 3056.2 | 100.00 |

The excavation revealed the presence of a shallow subsurface deposit. The majority (n=7) of the STPs were terminated at or above 30 cm below the surface due to bedrock (Photograph 4). Two STPs (No. 5 and 9) were excavated until 50 cm below the surface before bedrock was encountered. The final STP was excavated to 38 cm below the surface. The soil was the same in all STPs. The soil consisted of lightly compacted, brown sandy loam. STPs 5 and 10 had a layer of decomposing granite above the bedrock layer.

Debitage

A total of 172 flakes and angular waste fragments were recovered from the surface collection and STPs. This represents approximately 90 percent of the total artifact recovery at the site by count. The majority of thedebitage was recovered during the surface collection. Only 11 pieces were recovered from the STPs. Table 4 lists the flakes and angular waste recovered from CA-SDI-19,241. The sixdebitage types were grouped by reduction stages and separated by material type. The reduction stages include primary, secondary, and tertiary reduction. Material types consisted of fine-grained metavolcanic, fine-grained, porphyritic metavolcanic, and quartz.

The majority of thedebitage consisted of secondary reduction flakes, accounting for approximately 43 percent of the total artifact recovery by count. This was followed by secondary shatter. This type ofdebitage may be produced by miss hits or because inclusions in a core or parent stone result in an unpredictable breakage pattern. The most numerous material (146 pieces) was fine-grained metavolcanic material, representing approximately 85 percent of thedebitage by count.

Flaked Lithic Artifacts

A total of ten flaked lithic artifacts and cores were recovered at CA-SDI-19,241 (Table 5). This represents 5.24 percent of the total artifact recovery at the site by count. One flaked lithic artifact was recovered from the STPs, the other nine were surface-collected. The types and numbers of flaked lithic artifacts recovered are discussed below.

Biface

One bifacially flaked, leafed-shaped artifact was recovered during the surface collection (Photograph 5). Bifaces may be defined as specimens flaked on two sides with a thin section compared to the length or width. The edge angles are less than 30 degrees. The edges are usually convex with an overall leaf-shaped profile composed of a pointed tip and ovate base. Catalog number 9009 was broken base of a biface. It was rounded and originally probably longer in relation to its width. It was bifacially flaked on its edges and had a thin cross-section. Edge angles were less than 30 degrees. It had been made of fine-grained metavolcanic stone. It did not exhibit evidence of use-wear nor any significant retouch of the edges.



PHOTOGRAPH 4
STP 4 with Some Bedrock and Cobbles

TABLE 4
DEBITAGE BY TYPE AND MATERIAL

| Flake or Shatter Type | Fine-Grained Metavolcanic | % | Fine-Grained, Porphyritic Metavolcanic | % | Quartz | % | Total | % |
|----------------------------------|------------------------------|-------|--|-------|--------|------|-------|-------|
| <i>Primary Reduction</i> | | | | | | | | |
| Cortex removal | | | | | | | | |
| Count | 11 | 6.40 | - | | - | | 11 | 6.40 |
| Weight (g) | 161.4 | 20.00 | - | | - | | 161.4 | 20.00 |
| Primary shatter | | | | | | | | |
| Count | 9 | 5.23 | - | | 2 | 1.16 | 11 | 6.40 |
| Weight (g) | 23.4 | 2.90 | - | | 2.4 | 0.30 | 25.8 | 3.20 |
| Total Primary Reduction | | | | | | | | |
| Count | 20 | 11.63 | - | | 2 | 1.16 | 22 | 12.80 |
| Weight (g) | 184.8 | 22.90 | - | | 2.4 | 0.30 | 240.1 | 23.20 |
| <i>Secondary reduction</i> | | | | | | | | |
| Core reduction, basic shaping | | | | | | | | |
| Count | 59 | 34.30 | 10 | 5.81 | 5 | 2.91 | 74 | 43.02 |
| Weight (g) | 410.7 | 50.89 | 83.4 | 10.33 | 23.2 | 2.87 | 517.3 | 64.10 |
| Total Secondary Reduction | | | | | | | | |
| Count | 59 | 34.30 | 10 | 5.81 | 5 | 2.91 | 74 | 43.02 |
| Weight (g) | 410.7 | 50.89 | 83.4 | 10.33 | 23.2 | 2.87 | 517.3 | 64.10 |
| <i>Tertiary Reduction</i> | | | | | | | | |
| Finishing, resharpening | | | | | | | | |
| Count | 25 | 14.53 | - | | 2 | 1.16 | 27 | 15.70 |
| Weight (g) | 39.8 | 4.93 | - | | 2.2 | 0.27 | 42.0 | 5.20 |
| Trimming | | | | | | | | |
| Count | 4 | 2.33 | - | | - | | 4 | 2.33 |
| Weight (g) | 3.5 | 0.43 | - | | - | | 3.5 | 0.43 |
| Total Tertiary Reduction | | | | | | | | |
| Count | 29 | 16.89 | - | | 2 | 1.16 | 31 | 18.02 |
| Weight (g) | 43.3 | 5.36 | - | | 2.2 | 0.27 | 45.5 | 5.63 |
| Secondary shatter | | | | | | | | |
| Count | 38 | 22.09 | - | | 7 | 4.07 | 45 | 26.16 |
| Weight (g) | 52.2 | 6.47 | - | | 4.8 | 0.59 | 57.0 | 7.06 |
| Total Count | 146 | 84.88 | 10 | 5.81 | 16 | 9.3 | 172 | 100 |
| Total Weight (g) | 691.0 | 85.63 | 83.4 | 10.33 | 32.6 | 4.04 | 807.0 | 100 |

TABLE 5.
FLAKED LITHIC ARTIFACTS BY TYPE AND MATERIAL

| Type | Data | FGM | % | FGPM | % | Total | % |
|----------------------|------------|-------|-------|------|-------|-------|--------|
| Biface | Count | 1 | 10.00 | - | - | 1 | 10.00 |
| | Weight (g) | 2.1 | 0.98 | - | - | 2.1 | 0.98 |
| Blade | Count | 1 | 10.00 | - | - | 1 | 10.00 |
| | Weight (g) | 10.9 | 5.11 | - | - | 10.9 | 5.11 |
| Core | Count | 3 | 30.00 | - | - | 3 | 30.00 |
| | Weight (g) | 79.7 | 37.38 | - | - | 79.7 | 37.38 |
| Undifferentiated FLA | Count | - | - | 1 | 10.00 | 1 | 10.00 |
| | Weight (g) | - | - | 13.3 | 6.24 | 13.3 | 6.24 |
| Utilized flake | Count | 3 | 30.00 | - | - | 3 | 30.00 |
| | Weight (g) | 69.9 | 32.79 | - | - | 69.9 | 32.79 |
| Domed scraper | Count | 1 | 10.00 | - | - | 1 | 10.00 |
| | Weight (g) | 37.3 | 17.50 | - | - | 37.3 | 17.50 |
| Total Count | | 9 | 90.00 | 1 | 10.00 | 10 | 100.00 |
| Total Weight (g) | | 199.9 | 93.76 | 13.3 | 6.24 | 213.2 | 100.00 |

FGM = fine-grained metavolcanic

FGPM = fine-grained porphyritic metavolcanic

FLA = flaked lithic artifacts



PHOTOGRAPH 5
Biface Fragment and Blade Fragment



PHOTOGRAPH 6
Domed Scraper and Undifferentiated Flaked Lithic Artifact Fragment

Blade

One blade was recovered during the surface collection (see Photograph 5). A blade is a flake that is twice as long as it is wide with parallel edges which are perpendicular to the striking platform. Edge angles should be less than 30 degrees. Edge damage is typically limited to rounding and nibbling, but minimal microstepping is acceptable. Catalog number 9001 measured 39 mm long, 25 mm wide, and 9 mm thick. It was almost twice as long as it was wide. It had been utilized and had rounding and nibbling as edge damage. It had been made of fine-grained metavolcanic stone and had some cortex.

Cores

Three cores were recovered. Cores have one or more flakes that have been intentionally removed, but have not been utilized as a tool. The production base is typically cobble or flake. Edges may be unifacially or bifacially flaked and should have angles less than 90 degrees. All three recovered cores were whole and made of fine-grained metavolcanic stone. Two of them (Catalog numbers 9003 and 9004) were unifacially flaked. Catalog number 9004 was recovered from the 50 cm level of STP 9 and had some cortex. The third core (Catalog number 9000) had some cortex.

Domed Scraper

One domed scraper was recovered during the surface collection (Photograph 6). Domed scrapers are often made from very thick flakes or recycled cores. One or more edges may be unifacially retouched, forming a flake-scarred hump. Edge angles are typically around 60 degrees, and damage can range from nibbling to microstepping. Catalog number 9006 was made from a recycled, fine-grained metavolcanic core. It was unifacially retouched on one side with evidence of microstepping. It measured 45 mm long, 36 mm wide, and 21 mm thick.

Utilized Flakes

Three utilized flakes were recovered. Utilized flakes are flakes or spalls, whole or fragmented, which show evidence of use but lack intentional retouch. Edge angles are typically less than 60 degrees, and damage is usually limited to microstepping, nibbling, or rounding, although items of larger mass may show crushing or battering. All three recovered flakes were whole and made of fine-grained metavolcanic stone. Catalog number 9008 was partially burned, possibly during the October wildfire of 2007. Two the flakes (Catalog numbers 9005 and 9008) showed evidence of nibbling and rounding. The third one (Catalog number 9007) had evidence of battering.

Undifferentiated Flaked Lithic Artifacts

One artifact fragment was recovered that was too incomplete to be classified into any other category (see Photograph 6). Catalog number 9002 had been unifacially flaked

and had evidence of rounding and microstepping on one edge. It was made of fine-grained porphyritic metavolcanic stone and weighed 13.3 grams.

Ground Stone Artifacts

Four ground stone artifacts were recovered during the surface collection. This represents 2.09 percent of the total recovered artifacts from the site by count.

Manos

Two mano fragments were recovered. Catalog number 3000 was broken and bifacially unshaped. It was made of granitic rock and measured 78 mm wide and 60 mm thick. No length was taken since it was broken. It weighed 699.2 grams. Catalog number 3001 was whole and bifacially shaped. It was made of coarse-grained metavolcanic stone and measured 82 mm long, 77 mm wide, and 52 mm thick. It weighed 536.7 grams. One side was only slightly used, and one end had some battering.

Metate

Two metate fragments were recovered. Both were small pieces made of granitic rock. Catalog number 3002 weighed 441.2 grams, and catalog number 3003 weighed 245.9 grams. The grinding surfaces of both were well worn and exfoliating some.

Ceramics

Five ceramic sherds were recovered during the surface collection. All five sherds were burnt Tizon Brown Ware. There were two rim sherds. Four of the five were in close proximity and may have been part of the same vessel.

5.0 INTERPRETATION OF RESOURCE IMPORTANCE AND IMPACT IDENTIFICATION

5.1 Resource Importance

The criteria used to identify significant archaeological and historic resources are based the San Diego County Local Register criteria of significance. The local register is similar to the National Register and California Register but is different in that significance is evaluated at a local level. Sites, buildings, and structures are eligible for the San Diego County Register if they are:

- 1) Resources associated with events that have made a significant contribution to the broad patterns of California or County history and cultural heritage.
 - CA-SDI-19,241 does not meet this criterion.
- 2) Resources associated with the lives of persons important to our past, including the history of San Diego County or its communities.
 - CA-SDI-19,241 does not meet this criterion.
- 3) Resources that embody the distinctive characteristics of a type, period, region (San Diego County), or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
 - CA-SDI-19,241 does not meet this criterion.
- 4) Resources that have yielded, or may be likely to yield, information important in prehistory or history.
 - CA-SDI-19,241 meets this criterion. The artifacts and features from the site may answer questions regarding site occupation and function or type.
 - The results of the test excavations suggest tool manufacturing as a site activity. This is based on the amount of debitage recovered. It appears that initial reduction may have taken place off-site due to the small percentage of primary reduction flakes and waste (13% by count and 23% by weight). The amount of secondary reduction flakes (43% by count and 64% by weight) and the presence of three small cores support the fact that tools were being manufactured. There is evidence that some tools were being finished and retouched as represented by the tertiary reduction flakes (18% by count and 6% by weight). The reduced percentage of tertiary reduction flakes may be a result of the difficulty of locating these small flakes on the surface.
 - The presence of 13 milling features and five ground stone artifacts suggests that plant processing was also a site activity. All the grinding elements consisted of slicks, implying that acorns were not being processed despite the presence of oak trees. Further analysis such as macrobotanical studies or protein analysis could identify what plants were being processed.
 - The artifact types and features place this site as a Late Prehistoric Period site. Suitable material for radiocarbon dating could more accurately identify when the site was occupied. Was it towards the beginning of the Late Prehistoric Period?
- 5) Districts are significant resources if they are composed of integral parts of the environment not sufficiently significant by reason of historical association or artistic

merit to warrant individual recognition, but collectively compose an entity of exceptional historical or artistic significance, or outstanding commemorate or illustrate a way of life or culture.

- CA-SDI-19,241 does not meet this criterion.
- 6) The County of San Diego Resource Protection Ordinance (RPO) significant prehistoric or historic sites are not applicable to this project. The RPO does not apply because the road realignment is public project. Section 86.605 (2)(c) of the RPO exempts “any essential public facility or project, or recreation facility which includes public use when ... (2) All possible mitigation measures have been incorporated into the facility or project, and there are no feasible less environmentally damaging location, alignment, or non-structural alternatives that would meet project objectives” (Title 8, Division 6, Chapter 6 of San Diego County Code of Regulatory Ordinances).
- 7) A resource shall be considered significant if it contains any human remains interred outside of a formal cemetery.
- CA-SDI-19,241 does not meet this criterion, based on the limited test excavation and surface collection. The probability of encountering human remains appears to be low.
- 8) Resources must retain enough of their integrity to be recognizable as historical resources and to convey the reasons for their significance.

CA-SDI-19,241 meets this criterion. Disturbances to the site include the east–west dirt access road for the power poles and two vehicle turnaround spots. Erosion has intensified these disturbances; however, artifacts were still abundantly present in these areas. In fact, the minimal grading and erosion may have exposed a greater amount of artifacts. There was a higher concentration of surface artifacts in these areas of disturbances. The remainder of the site retains its integrity. The location and setting of the rest of the site have not been highly compromised.

5.2 Impact Identification

The road realignment would result in direct impacts to a portion of CA-SDI-19,241. An unknown amount of subsurface artifacts and two milling features would be disturbed or destroyed during the cut for the road (Confidential Appendix D). The impacts would be significant and mitigable to below significance through a data recovery program and construction monitoring.

Specific guidance was from Section 4.2, County of San Diego Guidelines for Determining Significance of Cultural Resources: Archaeological and Historic Resources (County, December 5, 2007). Pursuant to the County of San Diego Guidelines for Determining Impact Significance—Cultural Resources (2007), any of the following will be considered a significant impact to cultural resources:

- 1) The project causes a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the State CEQA Guidelines. This shall include the destruction, disturbance, or any alteration of characteristics or elements of a resource that cause it to be significant in a manner not consistent with the Secretary of the Interior Standards.
 - Site CA-SDI-19,241 is considered significant under CEQA and therefore is a historical resource. The proposed project would cause a substantial adverse change in the significance of site CA-SDI-19,241.

- 2) The project causes a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the State CEQA Guidelines. This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory.
 - Because of portion of a significant archaeological site will be destroyed, the project would cause a substantial adverse change in the significance of site CA-SDI-19,241.

- 3) The project disturbs any human remains, including those interred outside of formal cemeteries.
 - It is assumed that the project will not disturb any human remains. There was no evidence of human remains on the surface or in the limited test excavation.

- 4) The project proposes activities or uses damaging to significant cultural resources as defined by the RPO and fails to preserve those resources.

6.0 MANAGEMENT CONSIDERATIONS

6.1 Unmitigated Impacts

Impacts to CA-SDI-19,241 as a result of the proposed realignment can be mitigated.

6.2 Mitigated Impacts

Unavoidable direct impacts would occur to the archaeological deposits at CA-SDI-19,241 during the construction of the realignment of the road. Based on the current plans, approximately 10,315 square feet (958 square meters) of CA-SDI-19,241 would be impacted by the road realignment.

6.2.1 Mitigation Measures

The unavoidable impacts to CA-SDI-19,241 within the APE can be mitigated to a level below significance through a data recovery program and construction monitoring. The implementation of the testing excavation impacted CA-SDI-19,241, because surface artifacts were collected and some subsurface deposits were disturbed and removed during the excavation of the STPs.

A data recovery program would impact a portion of CA-SDI-19,241 within the APE. The purpose of the data recovery program is to extract an adequate sample of the data to reduce the level of impacts from road realignment to a less than significant level. RECON recommends that the data recovery program be divided into two phases. Phase I would consist of excavation of five 1x1-meter units located within the APE. Five 1x1-meter units represent approximately 0.5% of the total impacts to the site.

All units would be hand-excavated in 10-cm increments until there are two sterile 10-cm levels, subsurface conditions permitting. All soil from the units will be passed through a 1/8-inch mesh, and artifacts and ecofacts will be removed and placed in appropriately labeled bags to be cleaned, catalogued, and analyzed. The artifact collection shall be curated at an approved curation facility, such as the San Diego Archaeology Center.

Faunal, macrobotanical, and radiocarbon samples suitable for special analysis will be collected where appropriate. Column samples will be taken from one unit that has the highest potential for macrobotanical remains. The column sample will be processed to extract the light fraction suspended within the soil matrix and submitted to an

ethnobotanical laboratory for analysis. This analysis will reveal the plant species present in the sample and thus those present during prehistoric times. Radiocarbon samples will be ideally recovered from charred remains from a feature, such as a hearth. If such samples are not recovered, marine shell or burnt bone may be submitted for dating.

The results from Phase I would be compared to the results from the test excavation and surface collection conducted by RECON as discussed in this report. RECON anticipates that the effort proposed for Phase I will generate the necessary data and demonstrate redundancy in the recovery. Redundancy is the point at which continued excavation would produce only larger amounts of already represented data. If redundancy is not achieved by Phase I of the program, then Phase II shall involve excavating an additional five 1x1-meter units placed in areas where Phase I units indicate a greater opportunity to resolve research questions.

7.0 REFERENCES

Advisory Council on Historic Preservation

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8.0 LIST OF PREPARERS AND PERSONS/ORGANIZATION CONTACTED

8.1 Project Participants

8.1.1 RECON Environmental, Inc.

| | |
|----------------------|---|
| Carmen Zepeda-Herman | Principal Investigator and report author |
| Jackson Underwood | Senior Reviewer |
| Harry Price | Field archaeologist |
| Thomas Sowles | Field archaeologist, laboratory technician |
| Evangelina Franco | Laboratory technician |
| Frank McDermott | GIS Specialist, maps and spatial data processing |
| Vince Martinez | Graphic Artist, photographs |
| Eija Blocker | Production Specialist, report format and technical review |

8.1.2 Red Tail Monitoring and Research, Inc.

| | |
|-------------------|-------------------------|
| Steve Leash | Native American Monitor |
| Gabe Kitchen, Jr. | Native American Monitor |

8.2 Organization Contacted

South Coastal Information Center and Museum of Man, record search data.

APPENDIX A

| CAT# | TASK CODE | TASK# | LEVEL | CLASS | TYPE | MATERIAL | COUNT | WEIGHT | LENGTH | WIDTH |
|--|--------------------|-------|-------|----------|------------------------------------|----------|-------|--------|--------|-------|
| 1000 | STP | 4 | 0-10 | Debitage | Finishing, resharpening | FGM | 1 | 0.2 | | |
| 1001 | STP | 4 | 10-20 | Debitage | Core reduction, basic shaping | FGM | 1 | 3.9 | | |
| 1002 | STP | 4 | 20-30 | Debitage | Core reduction, basic shaping | FGM | 1 | 2.8 | | |
| 1003 | STP | 2 | 0-10 | Debitage | Shatter during primary reduction | FGM | 1 | 0.4 | | |
| 1004 | STP | 2 | 10-20 | Debitage | Core reduction, basic shaping | FGM | 1 | 3.4 | | |
| 1005 | Surface collection | 78 | | Debitage | Core reduction, basic shaping | FGM | 1 | 5.4 | | |
| 1006 | Surface collection | 113 | | Debitage | Finishing, resharpening | FGM | 1 | 1.2 | | |
| 1007 | Surface collection | 108 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.6 | | |
| 1008 | Surface collection | 99 | | Debitage | Core reduction, basic shaping | FGPM | 1 | 8.1 | | |
| 1009 | Surface collection | 112 | | Debitage | Core reduction, basic shaping | FGPM | 1 | 1 | | |
| 1010 | Surface collection | 101 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.1 | | |
| 1011 | Surface collection | 79 | | Debitage | Shatter during secondary reduction | FGM | 1 | 2 | | |
| 1012 | Surface collection | 122 | | Debitage | Core reduction, basic shaping | FGM | 1 | 12.1 | | |
| 1013 | Surface collection | 173 | | Debitage | Core reduction, basic shaping | Quartz | 1 | 1.8 | | |
| 1014 | Surface collection | 74 | | Debitage | Core reduction, basic shaping | FGPM | 1 | 1.9 | | |
| 1015 | Surface collection | 138 | | Debitage | Core reduction, basic shaping | FGM | 1 | 1.7 | | |
| 1016 | Surface collection | 69 | | Debitage | Core reduction, basic shaping | FGM | 1 | 6.4 | | |
| 1017 | Surface collection | 66 | | Debitage | Cortex removal | FGM | 1 | 8 | | |
| 1018 | Surface collection | 166 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.5 | | |
| 1019 | Surface collection | 164 | | Debitage | Core reduction, basic shaping | FGM | 1 | 1.7 | | |
| 1020 | Surface collection | 85 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.9 | | |
| 1021 | Surface collection | 96 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.4 | | |
| 1022 | Surface collection | 102 | | Debitage | Core reduction, basic shaping | Quartz | 1 | 2.1 | | |
| 1023 | Surface collection | 104 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.4 | | |
| 1024 | Surface collection | 103 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.5 | | |
| 1025 | Surface collection | 71 | | Debitage | Core reduction, basic shaping | FGPM | 1 | 6.5 | | |
| 1026 | Surface collection | 163 | | Debitage | Core reduction, basic shaping | FGPM | 1 | 2.2 | | |
| 1027 | Surface collection | 105 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.5 | | |
| 1028 | Surface collection | 107 | | Debitage | Shatter during primary reduction | Quartz | 1 | 1.8 | | |
| 1029 | Surface collection | 109 | | Debitage | Core reduction, basic shaping | FGM | 1 | 4.3 | | |
| 1030 | Surface collection | 80 | | Debitage | Shatter during secondary reduction | Quartz | 1 | 0.3 | | |
| 1031 | Surface collection | 65 | | Debitage | Core reduction, basic shaping | FGM | 1 | 11.3 | | |
| 1032 | Surface collection | 76 | | Debitage | Finishing, resharpening | FGM | 1 | 0.8 | | |
| 1033 | Surface collection | 81 | | Debitage | Core reduction, basic shaping | FGM | 1 | 4.5 | | |
| 1034 | Surface collection | 61 | | Debitage | Core reduction, basic shaping | FGM | 1 | 7.3 | | |
| NOTE: FGM=fine grained metavolcanic | | | | | | | | | | |
| FGPM=fine grained metavolcanic porphyritic | | | | | | | | | | |
| CGM=coarse grained metavolcanic | | | | | | | | | | |
| STP=25cmx50cm shovel test pit | | | | | | | | | | |
| FLA=flaked lithic artifact | | | | | | | | | | |

| CAT# | THICKNESS | CONDITION | STATUS |
|-------|-----------|-----------|---------|
| 1000 | | Whole | Curated |
| 1001 | | Whole | Curated |
| 1002 | | Whole | Curated |
| 1003 | | Whole | Curated |
| 1004 | | Whole | Curated |
| 1005 | | Whole | Curated |
| 1006 | | Whole | Curated |
| 1007 | | Whole | Curated |
| 1008 | | Whole | Curated |
| 1009 | | Whole | Curated |
| 1010 | | Whole | Curated |
| 1011 | | Whole | Curated |
| 1012 | | Whole | Curated |
| 1013 | | Whole | Curated |
| 1014 | | Whole | Curated |
| 1015 | | Whole | Curated |
| 1016 | | Whole | Curated |
| 1017 | | Whole | Curated |
| 1018 | | Whole | Curated |
| 1019 | | Whole | Curated |
| 1020 | | Whole | Curated |
| 1021 | | Whole | Curated |
| 1022 | | Whole | Curated |
| 1023 | | Whole | Curated |
| 1024 | | Whole | Curated |
| 1025 | | Whole | Curated |
| 1026 | | Whole | Curated |
| 1027 | | Whole | Curated |
| 1028 | | Whole | Curated |
| 1029 | | Whole | Curated |
| 1030 | | Whole | Curated |
| 1031 | | Whole | Curated |
| 1032 | | Whole | Curated |
| 1033 | | Whole | Curated |
| 1034 | | Whole | Curated |
| NOTE: | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| CAT# | TASK CODE | TASK# | LEVEL | CLASS | TYPE | MATERIAL | COUNT | WEIGHT | LENGTH | WIDTH |
|------|--------------------|-------|-------|----------|------------------------------------|----------|-------|--------|--------|-------|
| 1035 | Surface collection | 75 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.5 | | |
| 1036 | Surface collection | 82 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.3 | | |
| 1037 | Surface collection | 77 | | Debitage | Core reduction, basic shaping | FGM | 1 | 5.6 | | |
| 1038 | Surface collection | 152 | | Debitage | Finishing, resharpening | FGM | 1 | 3 | | |
| 1039 | Surface collection | 148 | | Debitage | Finishing, resharpening | Quartz | 1 | 0.2 | | |
| 1040 | Surface collection | 143 | | Debitage | Finishing, resharpening | FGM | 1 | 1.1 | | |
| 1041 | Surface collection | 128 | | Debitage | Shatter during secondary reduction | FGM | 1 | 1.5 | | |
| 1042 | Surface collection | 139 | | Debitage | Core reduction, basic shaping | FGM | 1 | 5.9 | | |
| 1043 | Surface collection | 137 | | Debitage | Shatter during primary reduction | FGM | 1 | 1.5 | | |
| 1044 | Surface collection | 157 | | Debitage | Cortex removal | FGM | 1 | 11.8 | | |
| 1045 | Surface collection | 154 | | Debitage | Cortex removal | FGM | 1 | 1.8 | | |
| 1046 | Surface collection | 156 | | Debitage | Shatter during secondary reduction | FGM | 1 | 3.2 | | |
| 1047 | Surface collection | 118 | | Debitage | Core reduction, basic shaping | FGPM | 1 | 5.8 | | |
| 1048 | Surface collection | 135 | | Debitage | Core reduction, basic shaping | FGM | 1 | 6 | | |
| 1049 | Surface collection | 114 | | Debitage | Core reduction, basic shaping | FGM | 1 | 2.8 | | |
| 1050 | Surface collection | 106 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.3 | | |
| 1051 | Surface collection | 116 | | Debitage | Shatter during secondary reduction | FGM | 1 | 2.6 | | |
| 1052 | Surface collection | 87 | | Debitage | Core reduction, basic shaping | FGM | 1 | 24.6 | | |
| 1053 | Surface collection | 111 | | Debitage | Core reduction, basic shaping | FGM | 1 | 4.4 | | |
| 1054 | Surface collection | 129 | | Debitage | Shatter during secondary reduction | Quartz | 1 | 0.8 | | |
| 1055 | Surface collection | 97 | | Debitage | Trimming | FGM | 1 | 0.5 | | |
| 1056 | Surface collection | 132 | | Debitage | Finishing, resharpening | FGM | 1 | 0.1 | | |
| 1057 | Surface collection | 98 | | Debitage | Core reduction, basic shaping | FGM | 1 | 8.7 | | |
| 1058 | Surface collection | 115 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.4 | | |
| 1059 | Surface collection | 142 | | Debitage | Core reduction, basic shaping | FGM | 1 | 1.8 | | |
| 1060 | Surface collection | 131 | | Debitage | Trimming | FGM | 1 | 1.5 | | |
| 1061 | Surface collection | 141 | | Debitage | Core reduction, basic shaping | FGM | 1 | 10 | | |
| 1062 | Surface collection | 90 | | Debitage | Finishing, resharpening | FGM | 1 | 1.3 | | |
| 1063 | Surface collection | 110 | | Debitage | Finishing, resharpening | FGM | 1 | 2.6 | | |
| 1064 | Surface collection | 120 | | Debitage | Core reduction, basic shaping | FGPM | 1 | 30.3 | | |
| 1065 | Surface collection | 172 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.9 | | |
| 1066 | Surface collection | 52 | | Debitage | Core reduction, basic shaping | FGM | 1 | 2.7 | | |
| 1067 | Surface collection | 100 | | Debitage | Cortex removal | FGM | 1 | 46.3 | | |
| 1068 | Surface collection | 123 | | Debitage | Core reduction, basic shaping | FGM | 1 | 13.1 | | |
| 1069 | Surface collection | 53 | | Debitage | Cortex removal | FGM | 1 | 41.5 | | |
| 1070 | Surface collection | 167 | | Debitage | Shatter during secondary reduction | Quartz | 1 | 0.5 | | |
| 1071 | Surface collection | 73 | | Debitage | Core reduction, basic shaping | FGPM | 1 | 22.9 | | |
| 1072 | Surface collection | 170 | | Debitage | Shatter during secondary reduction | FGM | 1 | 1.2 | | |
| 1073 | Surface collection | 54 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.4 | | |
| 1074 | Surface collection | 55 | | Debitage | Finishing, resharpening | FGM | 1 | 1.6 | | |
| 1075 | Surface collection | 67 | | Debitage | Shatter during secondary reduction | FGM | 1 | 1.8 | | |

| CAT# | THICKNESS | CONDITION | STATUS |
|------|-----------|-----------|---------|
| 1035 | | Whole | Curated |
| 1036 | | Whole | Curated |
| 1037 | | Whole | Curated |
| 1038 | | Whole | Curated |
| 1039 | | Whole | Curated |
| 1040 | | Whole | Curated |
| 1041 | | Whole | Curated |
| 1042 | | Whole | Curated |
| 1043 | | Whole | Curated |
| 1044 | | Whole | Curated |
| 1045 | | Whole | Curated |
| 1046 | | Whole | Curated |
| 1047 | | Whole | Curated |
| 1048 | | Whole | Curated |
| 1049 | | Whole | Curated |
| 1050 | | Whole | Curated |
| 1051 | | Whole | Curated |
| 1052 | | Whole | Curated |
| 1053 | | Whole | Curated |
| 1054 | | Whole | Curated |
| 1055 | | Whole | Curated |
| 1056 | | Whole | Curated |
| 1057 | | Whole | Curated |
| 1058 | | Whole | Curated |
| 1059 | | Whole | Curated |
| 1060 | | Whole | Curated |
| 1061 | | Whole | Curated |
| 1062 | | Whole | Curated |
| 1063 | | Whole | Curated |
| 1064 | | Whole | Curated |
| 1065 | | Whole | Curated |
| 1066 | | Whole | Curated |
| 1067 | | Whole | Curated |
| 1068 | | Whole | Curated |
| 1069 | | Whole | Curated |
| 1070 | | Whole | Curated |
| 1071 | | Whole | Curated |
| 1072 | | Whole | Curated |
| 1073 | | Whole | Curated |
| 1074 | | Whole | Curated |
| 1075 | | Whole | Curated |

| CAT# | TASK CODE | TASK# | LEVEL | CLASS | TYPE | MATERIAL | COUNT | WEIGHT | LENGTH | WIDTH |
|------|--------------------|-------|-------|----------|------------------------------------|----------|-------|--------|--------|-------|
| 1076 | Surface collection | 63 | | Debitage | Finishing, resharpening | FGM | 1 | 0.8 | | |
| 1077 | Surface collection | 64 | | Debitage | Finishing, resharpening | FGM | 1 | 2.4 | | |
| 1078 | Surface collection | 56 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.9 | | |
| 1079 | Surface collection | 59 | | Debitage | Core reduction, basic shaping | FGM | 1 | 18.3 | | |
| 1080 | Surface collection | 60 | | Debitage | Shatter during secondary reduction | FGM | 1 | 6.8 | | |
| 1081 | Surface collection | 57 | | Debitage | Cortex removal | FGM | 1 | 6.4 | | |
| 1082 | Surface collection | 68 | | Debitage | Core reduction, basic shaping | FGM | 1 | 9.4 | | |
| 1083 | STP | 9 | 30-40 | Debitage | Shatter during secondary reduction | FGM | 1 | 0.3 | | |
| 1084 | STP | 9 | 30-40 | Debitage | Shatter during secondary reduction | Quartz | 1 | 0.4 | | |
| 1085 | Surface collection | 158 | | Debitage | Shatter during secondary reduction | FGM | 1 | 1.8 | | |
| 1086 | Surface collection | 119 | | Debitage | Core reduction, basic shaping | FGM | 1 | 2.2 | | |
| 1087 | Surface collection | 88 | | Debitage | Trimming | FGM | 1 | 0.2 | | |
| 1088 | Surface collection | 159 | | Debitage | Finishing, resharpening | FGM | 1 | 2.3 | | |
| 1089 | Surface collection | 161 | | Debitage | Finishing, resharpening | FGM | 1 | 1.5 | | |
| 1090 | Surface collection | 169 | | Debitage | Finishing, resharpening | FGM | 1 | 4.4 | | |
| 1091 | Surface collection | 174 | | Debitage | Shatter during secondary reduction | Quartz | 1 | 1.4 | | |
| 1092 | Surface collection | 94 | | Debitage | Shatter during secondary reduction | FGM | 1 | 1.1 | | |
| 1093 | Surface collection | 86 | | Debitage | Shatter during primary reduction | Quartz | 1 | 0.6 | | |
| 1094 | Surface collection | 92 | | Debitage | Core reduction, basic shaping | FGM | 1 | 6 | | |
| 1095 | Surface collection | 84 | | Debitage | Finishing, resharpening | Quartz | 1 | 2 | | |
| 1096 | Surface collection | 93 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.2 | | |
| 1097 | Surface collection | 95 | | Debitage | Trimming | FGM | 1 | 1.3 | | |
| 1098 | Surface collection | 175 | | Debitage | Finishing, resharpening | FGM | 1 | 1.3 | | |
| 1099 | Surface collection | 146 | | Debitage | Core reduction, basic shaping | FGM | 1 | 4.1 | | |
| 1100 | Surface collection | 91 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.3 | | |
| 1101 | Surface collection | 145 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.2 | | |
| 1102 | Surface collection | 83 | | Debitage | Core reduction, basic shaping | FGM | 1 | 4 | | |
| 1103 | Surface collection | 133 | | Debitage | Shatter during secondary reduction | FGM | 1 | 1.6 | | |
| 1104 | Surface collection | 89 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.2 | | |
| 1105 | Surface collection | 165 | | Debitage | Shatter during primary reduction | FGM | 1 | 0.9 | | |
| 1106 | Surface collection | 160 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.3 | | |
| 1107 | Surface collection | 149 | | Debitage | Shatter during secondary reduction | FGM | 1 | 2.4 | | |
| 1108 | Surface collection | 153 | | Debitage | Shatter during secondary reduction | FGM | 1 | 1.9 | | |
| 1109 | Surface collection | 144 | | Debitage | Shatter during primary reduction | FGM | 1 | 0.3 | | |
| 1110 | Surface collection | 151 | | Debitage | Cortex removal | FGM | 1 | 15.3 | | |
| 1111 | Surface collection | 171 | | Debitage | Core reduction, basic shaping | FGM | 1 | 12.1 | | |
| 1112 | Surface collection | 136 | | Debitage | Shatter during secondary reduction | FGM | 1 | 2.3 | | |
| 1113 | Surface collection | 147 | | Debitage | Finishing, resharpening | FGM | 1 | 0.7 | | |
| 1114 | Surface collection | 124 | | Debitage | Shatter during primary reduction | FGM | 1 | 1.1 | | |
| 1115 | Surface collection | 134 | | Debitage | Shatter during primary reduction | FGM | 1 | 0.2 | | |
| 1116 | Surface collection | 126 | | Debitage | Cortex removal | FGM | 1 | 12.7 | | |

| CAT# | THICKNESS | CONDITION | STATUS |
|------|-----------|-----------|---------|
| 1076 | | Whole | Curated |
| 1077 | | Whole | Curated |
| 1078 | | Whole | Curated |
| 1079 | | Whole | Curated |
| 1080 | | Whole | Curated |
| 1081 | | Whole | Curated |
| 1082 | | Whole | Curated |
| 1083 | | Whole | Curated |
| 1084 | | Whole | Curated |
| 1085 | | Whole | Curated |
| 1086 | | Whole | Curated |
| 1087 | | Whole | Curated |
| 1088 | | Whole | Curated |
| 1089 | | Whole | Curated |
| 1090 | | Whole | Curated |
| 1091 | | Whole | Curated |
| 1092 | | Whole | Curated |
| 1093 | | Whole | Curated |
| 1094 | | Whole | Curated |
| 1095 | | Whole | Curated |
| 1096 | | Whole | Curated |
| 1097 | | Whole | Curated |
| 1098 | | Whole | Curated |
| 1099 | | Whole | Curated |
| 1100 | | Whole | Curated |
| 1101 | | Whole | Curated |
| 1102 | | Whole | Curated |
| 1103 | | Whole | Curated |
| 1104 | | Whole | Curated |
| 1105 | | Whole | Curated |
| 1106 | | Whole | Curated |
| 1107 | | Whole | Curated |
| 1108 | | Whole | Curated |
| 1109 | | Whole | Curated |
| 1110 | | Whole | Curated |
| 1111 | | Whole | Curated |
| 1112 | | Whole | Curated |
| 1113 | | Whole | Curated |
| 1114 | | Whole | Curated |
| 1115 | | Whole | Curated |
| 1116 | | Whole | Curated |

| CAT# | TASK CODE | TASK# | LEVEL | CLASS | TYPE | MATERIAL | COUNT | WEIGHT | LENGTH | WIDTH |
|------|--------------------|-------|-------|----------|------------------------------------|----------|-------|--------|--------|-------|
| 1117 | Surface collection | 130 | | Debitage | Cortex removal | FGM | 1 | 10.4 | | |
| 1118 | Surface collection | 127 | | Debitage | Finishing, resharpening | FGM | 1 | 0.9 | | |
| 1119 | Surface collection | 140 | | Debitage | Shatter during secondary reduction | FGM | 1 | 1.7 | | |
| 1120 | Surface collection | 150 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.4 | | |
| 1121 | Surface collection | 32 | | Debitage | Cortex removal | FGM | 1 | 1.6 | | |
| 1122 | Surface collection | 48 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.7 | | |
| 1123 | Surface collection | 14 | | Debitage | Core reduction, basic shaping | Quartz | 1 | 10 | | |
| 1124 | STP | 9 | 0-10 | Debitage | Finishing, resharpening | FGM | 2 | 1.1 | | |
| 1125 | STP | 9 | 0-10 | Debitage | Shatter during primary reduction | FGM | 1 | 0.5 | | |
| 1126 | Surface collection | 7 | | Debitage | Shatter during primary reduction | FGM | 1 | 18.2 | | |
| 1127 | Surface collection | 47 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.4 | | |
| 1128 | Surface collection | 49 | | Debitage | Core reduction, basic shaping | FGM | 1 | 6.5 | | |
| 1129 | Surface collection | 50 | | Debitage | Shatter during secondary reduction | Quartz | 1 | 0.3 | | |
| 1130 | Surface collection | 13 | | Debitage | Shatter during secondary reduction | FGM | 1 | 3.2 | | |
| 1131 | Surface collection | 12 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.6 | | |
| 1132 | Surface collection | 15 | | Debitage | Core reduction, basic shaping | FGM | 1 | 9.9 | | |
| 1133 | Surface collection | 16 | | Debitage | Shatter during secondary reduction | FGM | 1 | 2.2 | | |
| 1134 | Surface collection | 17 | | Debitage | Finishing, resharpening | FGM | 1 | 0.9 | | |
| 1135 | Surface collection | 18 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.5 | | |
| 1136 | Surface collection | 20 | | Debitage | Core reduction, basic shaping | Quartz | 1 | 6.2 | | |
| 1137 | Surface collection | 19 | | Debitage | Shatter during secondary reduction | FGM | 1 | 1 | | |
| 1138 | Surface collection | 22 | | Debitage | Core reduction, basic shaping | FGM | 1 | 2.7 | | |
| 1139 | Surface collection | 21 | | Debitage | Shatter during secondary reduction | Quartz | 1 | 1.1 | | |
| 1140 | Surface collection | 24 | | Debitage | Core reduction, basic shaping | FGM | 1 | 5.1 | | |
| 1141 | Surface collection | 23 | | Debitage | Finishing, resharpening | FGM | 1 | 0.8 | | |
| 1142 | Surface collection | 25 | | Debitage | Core reduction, basic shaping | FGM | 1 | 6.4 | | |
| 1143 | Surface collection | 8 | | Debitage | Core reduction, basic shaping | FGPM | 1 | 3.2 | | |
| 1144 | Surface collection | 6 | | Debitage | Core reduction, basic shaping | FGM | 1 | 2.2 | | |
| 1145 | Surface collection | 5 | | Debitage | Core reduction, basic shaping | FGM | 1 | 2.2 | | |
| 1146 | Surface collection | 4 | | Debitage | Cortex removal | FGM | 1 | 5.6 | | |
| 1147 | Surface collection | 3 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.2 | | |
| 1148 | Surface collection | 2 | | Debitage | Shatter during primary reduction | FGM | 1 | 0.3 | | |
| 1149 | Surface collection | 11 | | Debitage | Core reduction, basic shaping | FGM | 1 | 48.2 | | |
| 1150 | Surface collection | 45 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.9 | | |
| 1151 | Surface collection | 46 | | Debitage | Core reduction, basic shaping | Quartz | 1 | 3.1 | | |
| 1152 | Surface collection | 155 | | Debitage | Finishing, resharpening | FGM | 1 | 2.5 | | |
| 1153 | Surface collection | 31 | | Debitage | Shatter during secondary reduction | FGM | 1 | 1.1 | | |
| 1154 | Surface collection | 26 | | Debitage | Core reduction, basic shaping | FGM | 1 | 34.9 | | |
| 1155 | Surface collection | 30 | | Debitage | Core reduction, basic shaping | FGM | 1 | 2.6 | | |
| 1156 | Surface collection | 29 | | Debitage | Finishing, resharpening | FGM | 1 | 1.4 | | |
| 1157 | Surface collection | 27 | | Debitage | Core reduction, basic shaping | FGM | 1 | 6.3 | | |

| CAT# | THICKNESS | CONDITION | STATUS |
|------|-----------|-----------|---------|
| 1117 | | Whole | Curated |
| 1118 | | Whole | Curated |
| 1119 | | Whole | Curated |
| 1120 | | Whole | Curated |
| 1121 | | Whole | Curated |
| 1122 | | Whole | Curated |
| 1123 | | Whole | Curated |
| 1124 | | Whole | Curated |
| 1125 | | Whole | Curated |
| 1126 | | Whole | Curated |
| 1127 | | Whole | Curated |
| 1128 | | Whole | Curated |
| 1129 | | Whole | Curated |
| 1130 | | Whole | Curated |
| 1131 | | Whole | Curated |
| 1132 | | Whole | Curated |
| 1133 | | Whole | Curated |
| 1134 | | Whole | Curated |
| 1135 | | Whole | Curated |
| 1136 | | Whole | Curated |
| 1137 | | Whole | Curated |
| 1138 | | Whole | Curated |
| 1139 | | Whole | Curated |
| 1140 | | Whole | Curated |
| 1141 | | Whole | Curated |
| 1142 | | Whole | Curated |
| 1143 | | Whole | Curated |
| 1144 | | Whole | Curated |
| 1145 | | Whole | Curated |
| 1146 | | Whole | Curated |
| 1147 | | Whole | Curated |
| 1148 | | Whole | Curated |
| 1149 | | Whole | Curated |
| 1150 | | Whole | Curated |
| 1151 | | Whole | Curated |
| 1152 | | Whole | Curated |
| 1153 | | Whole | Curated |
| 1154 | | Whole | Curated |
| 1155 | | Whole | Curated |
| 1156 | | Whole | Curated |
| 1157 | | Whole | Curated |

| CAT# | TASK CODE | TASK# | LEVEL | CLASS | TYPE | MATERIAL | COUNT | WEIGHT | LENGTH | WIDTH |
|------|--------------------|-------|-------|-------------|------------------------------------|-------------|-------|--------|--------|-------|
| 1158 | Surface collection | 41 | | Debitage | Core reduction, basic shaping | FGM | 1 | 2.3 | | |
| 1159 | Surface collection | 40 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.4 | | |
| 1160 | Surface collection | 39 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.4 | | |
| 1161 | Surface collection | 38 | | Debitage | Shatter during secondary reduction | FGM | 1 | 3.4 | | |
| 1162 | Surface collection | 37 | | Debitage | Core reduction, basic shaping | FGM | 1 | 14.6 | | |
| 1163 | Surface collection | 36 | | Debitage | Core reduction, basic shaping | FGM | 1 | 2.8 | | |
| 1164 | Surface collection | 34 | | Debitage | Finishing, resharpening | FGM | 1 | 1.3 | | |
| 1165 | Surface collection | 35 | | Debitage | Core reduction, basic shaping | FGPM | 1 | 1.5 | | |
| 1166 | Surface collection | 33 | | Debitage | Core reduction, basic shaping | FGM | 1 | 3.7 | | |
| 1167 | Surface collection | 44 | | Debitage | Core reduction, basic shaping | FGM | 1 | 9.6 | | |
| 1168 | Surface collection | 42 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.9 | | |
| 1169 | Surface collection | 43 | | Debitage | Shatter during secondary reduction | FGM | 1 | 0.1 | | |
| 1170 | STP | 9 | 40-50 | Debitage | Finishing, resharpening | FGM | 1 | 0.5 | | |
| 3000 | Surface collection | 10 | | Groundstone | Mano | Granite | 1 | 699.2 | | 78 |
| 3001 | Surface collection | 9 | | Groundstone | Mano | CGM | 1 | 536.7 | 82 | 77 |
| 3002 | Surface collection | 121 | | Groundstone | Slab | Granite | 1 | 441.2 | | |
| 3003 | Surface collection | 162 | | Groundstone | Slab | Granite | 1 | 245.9 | | |
| 6000 | Surface collection | 179 | | Ceramic | Body sherd | Tizon Brown | 1 | 42.3 | | |
| 6001 | Surface collection | 28 | | Ceramic | Rim sherd | Tizon Brown | 1 | 6.7 | | |
| 6002 | Surface collection | 177 | | Ceramic | Body sherd | Tizon Brown | 1 | 5.4 | | |
| 6003 | Surface collection | 178 | | Ceramic | Body sherd | Tizon Brown | 1 | 17.7 | | |
| 6004 | Surface collection | 168 | | Ceramic | Rim sherd | Tizon Brown | 1 | 40.9 | | |
| 9000 | Surface collection | 1 | | FLA | Core | FGM | 1 | 15.7 | 30 | 24 |
| 9001 | Surface collection | 70 | | FLA | Blade | FGM | 1 | 10.9 | | 25 |
| 9002 | Surface collection | 62 | | FLA | Undifferentiated FLA. | FGPM | 1 | 13.3 | | |
| 9003 | Surface collection | 125 | | FLA | Core | FGM | 1 | 24.6 | 42 | 37 |
| 9004 | STP | 9 | 40-50 | FLA | Core | FGM | 1 | 39.4 | 47 | 41 |
| 9005 | Surface collection | 117 | | FLA | Utilized flake | FGM | 1 | 26.5 | 52 | 52 |
| 9006 | Surface collection | 176 | | FLA | Domed scraper | FGM | 1 | 37.3 | 45 | 36 |
| 9007 | Surface collection | 72 | | FLA | Utilized flake | FGM | 1 | 37.2 | 45 | 43 |
| 9008 | Surface collection | 51 | | FLA | Utilized flake | FGM | 1 | 6.2 | 37 | 27 |
| 9009 | Surface collection | 58 | | FLA | Biface | FGM | 1 | 2.1 | | |

| CAT# | THICKNESS | CONDITION | STATUS |
|------|-----------|------------------------|---------|
| 1158 | | Whole | Curated |
| 1159 | | Whole | Curated |
| 1160 | | Whole | Curated |
| 1161 | | Whole | Curated |
| 1162 | | Whole | Curated |
| 1163 | | Whole | Curated |
| 1164 | | Whole | Curated |
| 1165 | | Whole | Curated |
| 1166 | | Whole | Curated |
| 1167 | | Whole | Curated |
| 1168 | | Whole | Curated |
| 1169 | | Whole | Curated |
| 1170 | | Whole | Curated |
| 3000 | 60 | Broken bifacial shaped | Curated |
| 3001 | 52 | Broken bifacial shaped | Curated |
| 3002 | | Broken | Curated |
| 3003 | | Broken | Curated |
| 6000 | | Broken | Curated |
| 6001 | | Broken | Curated |
| 6002 | | Broken | Curated |
| 6003 | | Broken | Curated |
| 6004 | | Broken and Burned | Curated |
| 9000 | 15 | Whole | Curated |
| 9001 | 9 | Broken | Curated |
| 9002 | 12 | Broken | Curated |
| 9003 | 20 | Whole | Curated |
| 9004 | 28 | Whole | Curated |
| 9005 | 14 | Whole | Curated |
| 9006 | 21 | Whole | Curated |
| 9007 | 20 | Whole | Curated |
| 9008 | 6 | Whole | Curated |
| 9009 | 7 | Broken | Curated |